

Title (en)  
Method of forming tooth grooves

Title (de)  
Verfahren zur Herstellung von Zahnnuten

Title (fr)  
Procédé pour la fabrication des rainures de dents

Publication  
**EP 1184122 B1 20050302 (EN)**

Application  
**EP 01121111 A 20010903**

Priority  
JP 2000271517 A 20000904

Abstract (en)  
[origin: EP1184122A1] A cup-shaped grindstone (18) for grinding an end face of an annular portion (3) of a work (W) to form tooth grooves (4) in the end face includes a grinding portion (21) provided around an outer periphery of a disk portion. Abrasive grains of CBN are electrodeposited on each of first (21a), second (21b) and third (21c) grinding faces of the grinding portion. Cooling-liquid ejecting bores (21d) are provided in a lower end of the first grinding face (21a). To form the tooth grooves (4), the following steps are carried out: a rough-finish processing step cuts the tooth grooves (4) by intermittently feeding the cup-shaped grindstone (18) in a predetermined amount at a time, and a finish processing step of finishing the tooth grooves (4) by retaining the cup-shaped grindstone (18) at a predetermined position after the rough-finish processing step. During both steps, a cooling liquid is supplied from cooling-liquid ejecting bores (21d) defined in the first grinding faces (21a) of the cup-shaped grindstone (18).  
<IMAGE>

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IPC 8 full level  
**B23F 9/02** (2006.01); **B23F 15/06** (2006.01); **B23F 19/05** (2006.01); **B23F 21/02** (2006.01); **B23F 21/03** (2006.01); **B24D 3/00** (2006.01); **B24D 3/06** (2006.01); **B24D 7/10** (2006.01); **B24D 7/18** (2006.01)

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Cited by  
CN106425305A; EP1440758A1; EP2650071A1; CN104220200A; EP2519755A4; RU2607062C2; US9518612B2; WO2011082240A1; US7052379B2; WO2013107339A1; WO2013152876A1

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